

IN THE CLAIMS:

- ✓ Please cancel claims 1 - 31 without prejudice. *already cancel*
- ✓ Please add the following claims:

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1 32. A method for creating and using a data structure in a memory for storing information for  
2 controlling customer resources for network traffic delivery comprising:  
3 entering a policy enforcement point (PEP) identifier corresponding to a policy  
4 enforcement point in a first field of the data structure;  
5 entering a group identifier corresponding to the group of endpoints in a second field of  
6 the data structure in the memory, wherein the group of endpoints being associated with the PEP;  
7 entering predetermined network utilization limit information for the group in a third field  
8 of the data structure, wherein the data structure is stored in the memory;  
9 receiving a message corresponding to a request for network resources for a data flow for  
10 one endpoint of the group of endpoints;  
11 accessing said data structure based on information contained within said message; and  
12 responding to said message based on information contained within said data structure.

1 33. The method recited in claim 32, wherein entering predetermined network utilization limit  
2 information for the group in a fourth field further comprises:  
3 entering a limit for a number of flow request attempts by the group occurring during a  
4 time period in a fourth field;  
5 entering a limit for an amount of bandwidth currently in use by the group in a fifth field;  
6 and  
7 entering a limit for a number of flows currently active for the group in a sixth field,  
8 wherein the limit for a number of flow request attempts.

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1 34. A method for creating and using a data structure in a memory for storing information for  
2 controlling customer resources for network traffic delivery comprising:  
3 entering a policy enforcement point (PEP) identifier corresponding to a PEP in a first  
4 field of the data structure;  
5 entering a group identifier corresponding to the group of endpoints in a second field of  
6 the data structure in the memory wherein the group of endpoints being associated with the PEP;  
7 entering network utilization level information for the group, the network utilization level  
8 information corresponding to a current amount of network resource consumption by the group in  
9 a third field of the data structure wherein the data structure is stored in the memory;  
10 receiving a message corresponding to a request for network resources for a data flow for  
11 one endpoint of the group of endpoints;  
12 accessing said data structure based on information contained within said message; and  
13 responding to said message based on information contained within said data structure.

1 35. The memory of claim 34 wherein entering network utilization level information for the  
2 group further comprises:  
3 entering a number of flow request attempts by the group occurring during a time period  
4 in a fourth field of the data structure;  
5 entering an amount of bandwidth currently in use by the group in a fifth field of the data  
6 structure; and  
7 entering a number of flows currently active for the group in a sixth field of the data  
8 structure.

1 36. A system for storing and using information in a data structure for controlling customer  
2 resources for network traffic delivery comprising:  
3 storage means for storing a policy enforcement point (PEP) identifier corresponding to a  
4 policy enforcement point in a first field of the data structure in the memory;  
5 storage means for storing a plurality of endpoint identifiers corresponding to a group of  
6 endpoints on a network in a second field of the data structure in the memory;  
7 storage means for storing a group identifier corresponding to the group of endpoints in a  
8 third field of the data structure in the memory, wherein the group of endpoints being associated  
9 with the policy enforcement point (PEP);  
10 storage means for storing predetermined network utilization limit information for the  
11 group in a fourth field of the data structure in the memory;  
12 receiving means for receiving a message corresponding to a request for network  
13 resources for a data flow for one endpoint of the group of endpoints;  
14 accessing means for accessing said data structure based on information contained within  
15 said message; and  
16 response means for responding to said message based on information contained within  
17 said data structure.

1 37. The system recited in claim 36 wherein the storage means for storing predetermined  
2 network utilization limit information further comprises:  
3 storage means for storing a limit for a number of flow request attempts by the group  
4 occurring during a time period in a fifth field;  
5 storage means for storing a limit for an amount of bandwidth currently in use by the  
6 group in a sixth field; and  
7 storage means for storing a limit for a number of flows currently active for the group in a  
8 seventh field wherein the limit for a number of flow request attempts.

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1 38. A system for storing and using information in a data structure for controlling customer  
2 resources for network traffic delivery comprising:  
3 storage means for storing a policy enforcement point (PEP) identifier corresponding to a  
4 PEP in a first field of the data structure;  
5 storage means for storing a group identifier corresponding to the group of endpoints in a  
6 second field of the data structure in the memory wherein the group of endpoints being associated  
7 with the PEP;  
8 storage means for storing network utilization level information for the group, the network  
9 utilization level information corresponding to a current amount of network resource consumption  
10 by the group in a third field of the data structure wherein the data structure is stored in the  
11 memory;  
12 receiving means for receiving a message corresponding to a request for network  
13 resources for a data flow for one endpoint of the group of endpoints;  
14 accessing means for accessing said data structure based on information contained within  
15 said message; and  
16 response means for responding to said message based on information contained within  
17 said data structure.

1 39. The system recited in claim 38 wherein the storage means for storing network utilization  
2 level information further comprises:  
3 storage means for storing a number of flow request attempts by the group occurring  
4 during a time period in a fourth field of the data structure;  
5 storage means for storing an amount of bandwidth currently in use by the group in a fifth  
6 field of the data structure; and  
7 storage means for storing a number of flows currently active for the group in a sixth field  
8 of the data structure.

1 40. A computer program product embodied in a computer readable medium for performing a  
2 method for controlling customer resources for network traffic delivery, the computer program  
3 product comprising:

4 instructions for storing a policy enforcement point (PEP) identifier corresponding to a  
5 policy enforcement point in a first field of a data structure;

6 instructions for storing a group identifier corresponding to the group of endpoints in a  
7 second field of the data structure in the memory wherein the group of endpoints being associated  
8 with the PEP;

9 instructions for storing predetermined network utilization limit information for the group  
10 in a third field of the data structure wherein the data structure is stored in the memory;

11 instructions for communicating with a requestor and for receiving a message  
12 corresponding to a request for network resources for a data flow for one endpoint of the group of  
13 endpoints;

14 instructions for accessing said data structure based on information contained within said  
15 message from the requestor; and

16 instructions for responding to said message based on information contained within said  
17 data structure.

1 41. The computer program product recited in claim 40 wherein said instructions for storing  
2 predetermined network utilization limit information for the group further comprise:

3 instructions for storing a limit for a number of flow request attempts by the group  
4 occurring during a time period in a fourth field;

5 instructions for storing a limit for an amount of bandwidth currently in use by the group  
6 in a fifth field; and

7 instructions for storing a limit for a number of flows currently active for the group in a  
8 sixth field wherein the limit for a number of flow request attempts.

1 42. A computer program product embodied in a computer readable medium for performing a  
2 method for controlling customer resources for network traffic delivery, the computer program  
3 product comprising:

4 instructions for storing policy enforcement point (PEP) identifier corresponding to a PEP  
5 in a first field of a data structure;

6 instructions for storing a group identifier corresponding to the group of endpoints in a  
7 second field of the data structure in the memory wherein the group of endpoints being associated  
8 with the PEP;

9 instructions for storing network utilization level information for the group, the network  
10 utilization level information corresponding to a current amount of network resource consumption  
11 by the group in a third field of the data structure wherein the data structure is stored in the  
12 memory;

13 instructions for communicating with a requestor and for receiving a message  
14 corresponding to a request for network resources for a data flow for one endpoint of the group of  
15 endpoints;

16 instructions for accessing said data structure based on information contained within said  
17 message; and

18 instructions for responding to said message based on information contained within said  
19 data structure.

1 43. The computer program product recited in claim 42 wherein the instructions for storing  
2 network utilization level information for the group further comprise:

3 instructions for storing a number of flow request attempts by the group occurring during a  
4 time period in a fourth field of the data structure;

5 instructions for storing an amount of bandwidth currently in use by the group in a fifth  
6 field of the data structure; and

7 instructions for storing a number of flows currently active for the group in a sixth field of  
8 the data structure.